Protocols

Sample Site Selection and Set-Up

Students select a 90 m x 90 m homogeneous site to carry out the Land Cover Sample Site Protocol and set-up the site to take the appropriate measurements.

Investigation Instruments

Students learn to use the MUC System, make and learn how to use the densiometer and clinometer. They also use a tape measure and determine their pace. This can be completed as one activity or in separate pieces. Students should also review how to use a compass. Instructions for this can be found in the GPS Investigation.

Land Cover Sample Site Protocol

Students locate, photograph, and determine the MUC class for 90 m x 90 m areas of homogeneous land cover.

Biometry Protocol

Students measure properties of vegetation and identify species in order to classify land cover using the MUC System and to provide supplemental information about their site.

Manual Land Cover Mapping Protocol

Students outline and label different areas of land cover as seen on their Landsat TM image to create a land cover map.

*Computer-aided Land Cover Mapping Protocol**

Students use MultiSpec to perform unsupervised clustering of their Landsat TM image and then assign MUC classes to every cluster to create a land cover map.

*Land Cover Change Detection Protocol**

Using MultiSpec, students compare two images of their GLOBE Study Site; one from the 1990's and one from the 2000's, to determine how the land cover has changed in that time span.

*Fire Fuel Ecology Protocol**

Students take additional measurements of fire fuel at Land Cover Sample Sites.

* See the full e-guide version of the *Teacher's Guide* available on the GLOBE Web site and CD-ROM.